DEVELOPMENT AND UTILIZATION OF REQUIRED DATA BASES FOR A COMPUTER AIDED PROCESS PLANNING SYSTEM

Abstract

Process planning is that function within a manufacturing facility that establishes which processes and parameters are to be used to convert materials from an initial form to a predetermined final form. The process planning function may be performed manually or with computer assistance. In which involves the determination of methods and sequences of machining to generate a finished component as specified. At this moment using computer more recently used for process planner to aid the machining process plan, and these concept known as Computer Aided Process Planning (CAPP) which can help reduce process planning time, and increase plan consistency and efficiency.

There are three techniques have been identified in Computer Aided Process Planning. These are the variant, the generative and Intelligent System. These Computer Aided Process Planning is Variant process planning which implements an indexing scheme which a process plan for a previously planned part is retrieved based on the planned part’s similarity to the new part.

In these research performed the integration of such knowledge of the process planner with conventional programming can provides good results. These system are being developed with required data bases: Parts Materials, Machines and tools in which with optimised methods of machining operations can be proceeded and extracted to new databases: Standard process. Finally it can be performed the Manufacturing Information System used to analyse with process planner for new machining process.